

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Philip Tousignant

Application No.: 10/732,975

Confirmation No.: 8522

Filed: December 11, 2003

Art Unit: 2831

For: SYSTEM AND METHOD FOR ROUTING  
CABLES

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Examiner: A. R. Estrada

**APPEAL BRIEF**

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

As required under 37 C.F.R. § 41.37(a), this brief is filed within two months of the Notice of Appeal filed in this case on December 19, 2006, and is in furtherance of said Notice of Appeal.

The fees required under 37 C.F.R. § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

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I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

Hewlett-Packard Development Company, L.P., a Limited Partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249, Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 40 claims pending in the application.

B. Current Status of Claims

1. Claims canceled: None
2. Claims withdrawn from consideration but not canceled: 36
3. Claims pending: 1-40
4. Claims allowed: None
5. Claims rejected: 1-35 and 37-40

C. Claims On Appeal

The claims on appeal are claims 1-35 and 37-40.

IV. STATUS OF AMENDMENTS

Appellant did not file an Amendment After Final Rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

According to claim 1, a cable routing system comprises: a first channel (*e.g.*, 100 of figure 1) for routing at least one of a plurality of cables (*e.g.*, 250 of figure 1) in a first direction, a second channel (*e.g.*, 200 of figure 1) for routing said at least one cable in a second direction, and a plurality of teeth (*e.g.*, 140 of figure 1) spaced apart from one another and disposed in one of said first channel and said second channel, said teeth positioned to create spaces in-between said plurality of cables before said at least one cable transitions from said first direction to said second direction (*e.g.*, page 8, line 7, to page 9, line 3).

According to claim 8, said teeth are mounted to a teeth base wherein said teeth base (*e.g.*, 145 of figure 3) is mounted to said first channel base (*e.g.*, 110 of figure 1 and page 6, lines 14-24).

According to claim 10, the first channel further comprises: a plurality of covers (*e.g.*, 150 of figure 1 and 155 of figure 2), a plurality of base fastening devices (*e.g.*, 165 of figure 2) attached to said base, a plurality of cover fastening devices (*e.g.*, 160 of figure 2) attached to said covers, and wherein at least one of said cover fastening devices is operative to secure

at least one of said plurality of covers to said base by fastening to at least one of said plurality of base fastening devices (*e.g.*, page 4, lines 15-20).

According to claim 12, the plurality of teeth extend diagonally outward from said first channel base (*e.g.*, page 10, lines 15-17).

According to claim 14, the first channel and the second channel are mounted inside of an electronics enclosure (*e.g.*, 300 of figure 1 and page 2, lines 23-25).

According to claim 16, at least a portion of said first channel is wider than said second channel thereby allowing said cables to spread out along said first channel before said cables transition from said first direction to said second direction (*see, e.g.*, items 100 and 200 of figure 5 and page 8; lines 15-19).

According to claim 19, a method (*e.g.*, figure 4) for routing cables comprises: defining a first channel (*e.g.*, 410 of figure 4), defining a second channel (*e.g.*, 420 of figure 4), disposing a plurality of teeth in one of said first channel and said second channel (*e.g.*, 430 of figure 4), wherein said teeth are spaced apart from one another to create a plurality of cable paths, and running said cables in said first channel, through said cable paths, and into said second channel (*e.g.*, 440 of figure 4 and page 9, lines 4-18).

According to claim 24, an apparatus (*e.g.*, 10 of figure 1) for increasing the bend radius of a plurality of cables (*e.g.*, 250 of figure 1) routed in a computer enclosure (*e.g.*, 300 of figure 1) from a first direction to a second direction that is different from said first direction comprises: a first channel (*e.g.*, 100 of figure 1) having a base (*e.g.*, 110 of figure 1) and a plurality of sides (*e.g.*, 120 of figure 1), and a second channel (*e.g.*, 200 of figure 1) having a base (*e.g.*, 210 of figure 1), a plurality of sides (*e.g.*, 220 of figure 1), and a plurality of teeth (*e.g.*, 140 of figure 1) spaced apart from one another operating to create spaces in-between said plurality of cables wherein said first channel and said second channel are positioned to create a cable bend area wherein said bend area is sized to allow said cables to maintain said spaces as said cables transition from said first channel to said second channel (*e.g.*, page 8, line 7, to page 9, line 3).

According to claim 27, the first channel further comprises: at least one cover (*e.g.*, 150 of figure 1 and 155 of figure 2), a plurality of base fastening devices (*e.g.*, 165 of figure 2) attached to said base, and a plurality of cover fastening devices (*e.g.*, 160 of figure 2) attached to said cover wherein said plurality of cover fastening devices operate to secure said cover to said base by fastening to said plurality of base fastening devices (*e.g.*, page 4, lines 15-20).

According to claim 29, said second channel further comprises: at least one cover (*e.g.*, 150 of figure 1 and 155 of figure 2), a plurality of second channel base fastening devices (*e.g.*, 165 of figure 2) attached to said second channel base, and a plurality of cover fastening devices (*e.g.*, 160 of figure 2) attached to said cover wherein said cover fastening devices operate to secure said cover to said second channel base by fastening to said second channel base fastening devices (*e.g.*, page 4, lines 15-20).

According to claim 33, a mechanism for routing a plurality of cables in an electronics enclosure comprises: means for routing said cables in a first direction (*e.g.*, 100 of figure 1 and page 3, lines 9-16), means for routing said cables in a second direction (*e.g.*, 200 of figure 1 and page 3, lines 17-21), means for increasing a plurality of bend radii of said plurality of cables while transitioning from said first direction routing means to said second direction routing means (*e.g.*, 140 of figure 1 and page 5, lines 6-18), wherein said bend radii increasing means comprises a plurality of teeth defining said bend radii.

According to claims 37-40, at least one of the teeth in independent claims 1, 19, 24, and 33 is a peg (*e.g.*, 140 of figure 1 and page 5, lines 14-18).

## VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1-7, 9-14, 17-29, 33-35, and 37-40 are rejected under 35 U.S.C. § 102(b) as being anticipated by (US 6,448,497, hereinafter *McCracken*).
2. Claims 18, 30, and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *McCracken*.

3. Claims 15, 16, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over *McCracken* in view of (UK Patent Application 2,222,913, hereinafter, *Kitagawa*).

## VII. ARGUMENT

### A. Note on Claim 8

Claim 8 is indicated as rejected on page 1 of the current Final Office Action (“Final Action”). However, claim 8 is not addressed by any of the three grounds of rejection. It should be noted, though, that neither *McCracken* nor a combination of *McCracken* and *Kitagawa* appear to teach or suggest a teeth base in addition to a first channel base. Thus, claim 8 is patentable over the cited art. Accordingly, reversal of the rejection of claim 8 is respectfully requested.

### B. First Ground of Rejection

At pages 2-10 of the current Final Action claims 1-7, 9-14, 17-29, 33-35, and 37-40 are rejected under 35 U.S.C. § 102(b) as being anticipated by *McCracken*. Appellant traverses the rejection.

To anticipate a claim under 35 U.S.C. § 102, a reference must teach every element of the claim. *See Verdegaal Bros. Inc. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Moreover, in order for an applied reference to be anticipatory under 35 U.S.C. § 102 with respect to a claim, “[t]he identical invention must be shown in as complete detail as is contained in the . . . claim.” *See Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913 (Fed. Cir. 1989). Furthermore, in order for a reference to be anticipatory under 35 U.S.C. § 102 with respect to a claim, “[t]he elements must be arranged as required by the claim.” *In re Bond*, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). As discussed further below, these requirements are not satisfied by the 35 U.S.C. § 102 rejection because *McCracken* does not teach every element of the claims.

## 1. Claims 1-7, 9, 11, 13, and 17

Independent claim 1 recites, in part, “a plurality of teeth spaced apart from one another and disposed in one of said first channel and said second channel.” Such feature is not taught by *McCracken* for at least two reasons. First, *McCracken* does not teach teeth. The Examiner cites the spacer portions 46 as teeth. Final Action at 3. However, the view in figure 2 of *McCracken* shows that spacer portions 46 each run the entire length of base member 24 and, in fact, each define channels 32, 34, 36, 38, 40, 42, and 44 along the length of base member 24. Thus, it is believed that spacer portions 46 do not teach the claimed teeth.

Second, even if the Examiner’s reading is viewed in the best light, *McCracken* fails to teach the teeth arranged as required by the claim. To be anticipatory, a reference must teach the elements arranged as claimed. *Bond*, 15 U.S.P.Q.2d at 1567. Without admitting that spacer portions 46 are teeth, it should be noted that spacer portions 46 are disposed between the channels 32, 34, 36, 38, 40, 42, and 44 rather than in a channel as claimed. It is worth noting that while the Final Action cites cable trays 22 as channels, such characterization is incorrect, as *McCracken* explicitly states that items 32, 34, 36, 38, 40, 42, and 44 are the channels, while items 22 are cable trays that each include a number of those channels. See *McCracken* at Col. 2, lines 27-30 and 37-40. Thus, even if spacer portions 46 are considered to be teeth, such teeth are not arranged in a channel as claimed, and according to *Bond*, *McCracken* does not anticipate claim 1.

In the Response to Arguments portion of the Final Action, the Examiner asserts that the term, “teeth,” covers spacer portions 46 when the language is given its broadest reasonable interpretation. Final Action at 13. Spacer portions 46 extend along the length of base portion 24 and define channels 32, 34, 36, 38, 40, 42, and 44. See *McCracken* at figure 2. Accordingly, it is simply not reasonable to assert that such structures are teeth.

Once again turning to the Response to Arguments section of the Final Action, it appears that the Examiner asserts that the term, “teeth,” also describes cable retaining section 94 when the language is given its broadest reasonable interpretation. Final Action at 13. Cable retaining section 94 is not properly described as teeth. Rather, cable retaining sections 94, 94’, and 94’’ are merely the periphery of base member 80. *McCracken* at Col. 3, lines

44-46 and figure 2. Further, cable retaining section 94 includes spacers 98; however, spacers 98 do not teach teeth as claimed. Instead, spacers 98 align with spacer portions 46 to define the walls of channels 32, 34, 36, 38, 40, 42, and 44. Thus, spacers 98 are part of the same channel wall structure as spacer portions 46 and are not properly described as “teeth.” Additionally, spacers 98 are not properly described as “disposed in one of said first channel and said second channel,” as required by claim 1. For at least these reasons, it is believed that *McCracken* does not teach the above-recited feature of claim 1.

Dependent claims 2-7, 9, 11, 13, and 17 each depend either directly or indirectly from independent claim 1 and, thus, inherit all of the limitations of independent claim 1. Thus, *McCracken* does not teach all claim limitations of claims 2-7, 9, 11, 13, and 17. It is respectfully submitted that dependent claims 2-7, 9, 11, 13, and 17 are allowable at least because of their dependence from claim 1 for the reasons discussed above. Accordingly, Appellant respectfully requests the withdrawal of the 35 U.S.C. § 102 rejection of claims 1-7, 9, 11, 13, and 17.

## 2. Claim 10

Claim 10 recites, in part, “a plurality of base fastening devices attached to said base,” and, “a plurality of cover fastening devices attached to said covers.” *McCracken* does not teach this feature of claim 10 at least because it does not teach both base fastening devices and cover fastening devices. The Examiner cites item 70 of figure 4 as a base fastening device and cites item 64 as a cover fastening device. Final Action at 4. However, item 64 is an aperture (i.e., a hole) rather than a device. See *McCracken* at Col. 3, lines 12-14. Thus, *McCracken* does not teach this feature of claim 10. Accordingly, reversal of the rejection of claim 10 is respectfully requested.

## 3. Claim 12

Claim 12 recites, in part, “said plurality of teeth extend diagonally outward from said first channel base.” *McCracken* does not teach this feature of claim 12 at least because it does not teach diagonally-extending teeth. For instance, the Examiner cites a “vertical direction” for items 46 and 96 of figure 1. Final Action at 5. However, vertical does not



teach diagonal. Thus, *McCracken* does not teach this feature of claim 12. Accordingly, reversal of the rejection of claim 12 is respectfully requested.

4. Claim 14

Claim 14 recites, in part, “said first channel and said second channel are mounted inside of an electronics enclosure.” *McCracken* does not teach this feature of claim 14 at least because it does not teach an electronics enclosure. For instance, the Examiner asserts that the *McCracken* device can be “mounted on any supporting surface.” Final Action at 5. However, simply asserting that a device can be mounted on a supporting surface is not enough to teach an electronics enclosure. Thus, *McCracken* does not teach this feature of claim 14. Accordingly, reversal of the rejection of claim 14 is respectfully requested.

5. Claim 18

While claim 18 is indicated as rejected under the first ground of rejection, it appears that claim 18 is actually rejected under the second ground of rejection. It is believed that the inclusion of claim 18 in the listing of claims rejected under the first ground is merely an error. Accordingly, claim 18 is addressed below with regard to the second ground of rejection.

6. Claim 37

Claim 37 recites, “The cable routing system of claim 1 wherein at least one of said plurality of teeth is a peg.” *McCracken* does not teach this feature at least because it does not teach a peg. The Examiner cites figures 4 and 5 of *McCracken* to teach the feature. Final Action at 9-10. Figure 4 does not teach a peg. Figure 4 of *McCracken* is a view of the mechanism of figure 3 wherein the line of sight is parallel to channels 32, 34, 36, 38, 40, 42, and 44. This is an incomplete (and somewhat misleading) view of spacer portions 46, which run the length of the mechanism shown in figure 2. As observed in figure 2, spacer portions 46 clearly are not pegs.

Figure 5 depicts spacers 98; however, spacers 98 do not teach pegs as claimed. Instead, spacers 98 align with spacer portions 46 to define the walls of channels 32, 34, 36, 38, 40, 42, and 44. In fact, spacers 98 are more appropriately described as a section of an elongated channel wall that includes items 98 and 46. Thus, spacers 98 are part of the same

channel wall structure as spacer portions 46 and are not properly described as “pegs.” For at least these reasons, it is believed that *McCracken* does not teach the above-recited feature of claim 37.

#### 7. Claims 19-23

Independent claim 19 recites, in part, “disposing a plurality of teeth in one of said first channel and said second channel, wherein said teeth are spaced apart from one another to create a plurality of cable paths.” As noted above, the Examiner cites spacer portions 46 of *McCracken* to teach the claimed teeth. Final Action at 5-6. However, the view in figure 2 shows that the spacer portions 46 each run the entire length of base member 24 and, in fact, each define channels 32, 34, 36, 38, 40, 42, and 44 along the length of base member 24. Thus, it is believed that spacer portions 46 do not teach the claimed teeth.

Further, without admitting that spacer portions 46 are teeth, it should be noted that spacer portions 46 are disposed between the channels 32, 34, 36, 38, 40, 42, and 44 rather than in a channel as claimed. *See McCracken* at Col. 2, lines 27-30 and 37-40 and figure 2. Accordingly, spacer portions 46 are not arranged as required by the claim language. Thus, *McCracken* is not anticipatory. *Bond*, 15 U.S.P.Q.2d at 1567. Therefore, *McCracken* does not teach the above-recited feature of claim 19.

In the Response to Arguments portion of the Final Action, the Examiner asserts that the term, “teeth,” covers spacer portions 46 when the language is given its broadest reasonable interpretation. Final Action at 13. Spacer portions 46 extend along the length of base portion 24 and define channels 32, 34, 36, 38, 40, 42, and 44. *See McCracken* at figure 2. Accordingly, it is simply not reasonable to assert that such structures are teeth.

Also, it appears that the Examiner asserts that the term, “teeth,” also describes cable retaining section 94 when the language is given its broadest reasonable interpretation. Final Action at 13. Cable retaining section 94 is not properly described as teeth. Rather, cable retaining sections 94, 94', and 94'' are merely the periphery of base member 80. *McCracken* at Col. 3, lines 44-46 and figure 2. Further, cable retaining section 94 includes spacers 98; however, spacers 98 do not teach teeth as claimed. Instead, spacers 98 align with spacer portions 46 to define the walls of channels 32, 34, 36, 38, 40, 42, and 44. Thus, spacers 98

are part of the same channel wall structure as spacer portions 46 and are not properly described as “teeth.” Additionally, spacers 98 are not properly described as disposed in “one of said first channel and said second channel,” as required by claim 19. For at least these reasons, it is believed that *McCracken* does not teach the above-recited feature of claim 19.

Dependent claims 20-23 each depend either directly or indirectly from independent claim 19 and, thus, inherit all of the limitations of independent claim 19. Thus, *McCracken* does not teach all claim limitations of claims 20-23. It is respectfully submitted that dependent claims 20-23 are allowable at least because of their dependence from claim 19 for the reasons discussed above. Accordingly, Appellant respectfully requests the withdrawal of the 35 U.S.C. § 102 rejection of claims 19-23.

#### 8. Claim 38

Claim 38 recites, “The method of claim 19 wherein at least one of said plurality of teeth is a peg.” *McCracken* does not teach this feature at least because it does not teach a peg. The Examiner cites figures 4 and 5 of *McCracken* to teach the feature. Final Action at 9-10. Figure 4 does not teach a peg. Figure 4 of *McCracken* is a view of the mechanism of figure 3 wherein the line of sight is parallel to channels 32, 34, 36, 38, 40, 42, and 44. This is an incomplete (and somewhat misleading) view of spacer portions 46, which run the length of the mechanism shown in figure 2. As observed in figure 2, spacer portions 46 clearly are not pegs.

Figure 5 depicts spacers 98; however, spacers 98 do not teach pegs as claimed. Instead, spacers 98 align with spacer portions 46 to define the walls of channels 32, 34, 36, 38, 40, 42, and 44. In fact, spacers 98 are more appropriately described as a section of an elongated channel wall that includes items 98 and 46. Thus, spacers 98 are part of the same channel wall structure as spacer portions 46 and are not properly described as “pegs.” For at least these reasons, it is believed that *McCracken* does not teach the above-recited feature of claim 38.

## 9. Claims 24-26, 28, and 30-32

Independent claim 24 recites, in part, “a second channel having a base, a plurality of sides, and a plurality of teeth spaced apart from one another operating to create spaces in-between said plurality of cables.” As noted above, the Examiner cites spacer portions 46 of *McCracken* to teach the claimed teeth. Final Action at 7. However, the view in figure 2 shows that the spacer portions 46 each run the entire length of base member 24 and, in fact, each define channels 32, 34, 36, 38, 40, 42, and 44 along the length of base member 24. Thus, it is believed that spacer portions 46 do not teach the claimed teeth. Further, without admitting that spacer portions 46 are teeth, it should be noted that spacer portions 46 are disposed between the channels 32, 34, 36, 38, 40, 42, and 44, such that no channel can be described as “having...a plurality of teeth” as claimed. Therefore, *McCracken* does not teach the above-recited feature of claim 24.

In the Response to Arguments portion of the Final Action, the Examiner asserts that the term, “teeth,” covers spacer portions 46 when the term is given its broadest reasonable interpretation. Final Action at 13. Spacer portions 46 extend along the length of base portion 24 and define channels 32, 34, 36, 38, 40, 42, and 44. *See McCracken* at figure 2. Accordingly, it is simply not reasonable to assert that such structures are teeth.

Also in the Response to Arguments section of the Final Action, it appears that the Examiner asserts that the term, “teeth,” describes cable retaining section 94 when the language is given its broadest reasonable interpretation. Final Action at 13. Cable retaining section 94 is not properly described as teeth. Rather, cable retaining sections 94, 94', and 94'' are merely the periphery of base member 80. *McCracken* at Col. 3, lines 44-46 and figure 2. Further, cable retaining section 94 includes spacers 98; however, spacers 98 do not teach teeth as claimed. Instead, spacers 98 align with spacer portions 46 to define the walls of channels 32, 34, 36, 38, 40, 42, and 44. Thus, spacers 98 are part of the same channel wall structure as spacer portions 46 and are not properly described as “teeth.” For at least these reasons, it is believed that *McCracken* does not teach the above-recited feature of claim 24.

Dependent claims 25, 26, 28, and 30-32 each depend either directly or indirectly from independent claim 24 and, thus, inherit all of the limitations of independent claim 24. Thus, *McCracken* does not teach all claim limitations of claims 25, 26, 28, and 30-32. It is

respectfully submitted that dependent claims 25, 26, 28, and 30-32 are allowable at least because of their dependence from claim 24 for the reasons discussed above. Accordingly, Appellant respectfully requests the withdrawal of the 35 U.S.C. § 102 rejection of claims 24-26, 28, and 30-32.

10. Claim 27

Claim 27 recites, in part, “a plurality of base fastening devices attached to said base,” and, “a plurality of cover fastening devices attached to said cover.” *McCracken* does not teach this feature of claim 27 at least because it does not teach both base fastening devices and cover fastening devices. The Examiner cites item 70 of figure 4 as a base fastening device and cites item 64 as a cover fastening device. Final Action at 8. However, item 64 is an aperture (i.e., a hole) rather than a device. See *McCracken* at Col. 3, lines 12-14. Thus, *McCracken* does not teach this feature of claim 27. Accordingly, reversal of the rejection of claim 27 is respectfully requested.

11. Claim 29

Claim 29 recites, in part, “a plurality of second channel base fastening devices attached to said second channel base,” and, “a plurality of cover fastening devices attached to said cover.” *McCracken* does not teach this feature of claim 29 at least because it does not teach both base fastening devices and cover fastening devices. The Examiner cites item 70 of figure 4 as a base fastening device and cites item 64 as a cover fastening device. Final Action at 8-9. However, item 64 is an aperture (i.e., a hole) rather than a device. See *McCracken* at Col. 3, lines 12-14. Thus, *McCracken* does not teach this feature of claim 29. Accordingly, reversal of the rejection of claim 29 is respectfully requested.

12. Claim 39

Claim 39 recites, “The apparatus of claim 24 wherein at least one of said plurality of teeth is a peg.” *McCracken* does not teach this feature at least because it does not teach a peg. The Examiner cites figures 4 and 5 of *McCracken* to teach the feature. Final Action at 9-10. Figure 4 does not teach a peg. Figure 4 of *McCracken* is a view of the mechanism of figure 3 wherein the line of sight is parallel to channels 32, 34, 36, 38, 40, 42, and 44. This is an incomplete (and somewhat misleading) view of spacer portions 46, which run the length

of the mechanism shown in figure 2. As observed in figure 2, spacer portions 46 clearly are not pegs.

Figure 5 depicts spacers 98; however, spacers 98 do not teach pegs as claimed. Instead, spacers 98 align with spacer portions 46 to define the walls of channels 32, 34, 36, 38, 40, 42, and 44. In fact, spacers 98 are more appropriately described as a section of an elongated channel wall that includes items 98 and 46. Thus, spacers 98 are part of the same channel wall structure as spacer portions 46 and are not properly described as “pegs.” For at least these reasons, it is believed that *McCracken* does not teach the above-recited feature of claim 39.

### 13. Claims 33-35

Independent claim 33 recites, in part, “means for increasing a plurality of bend radii of said plurality of cables while transitioning from said first direction routing means to said second direction routing means, wherein said bend radii increasing means comprises a plurality of teeth defining said bend radii.” As noted above, the Examiner cites spacer portions 46 of *McCracken* to teach the claimed teeth. Final Action at 7. However, the view in figure 2 shows that the spacer portions 46 each run the entire length of base member 24 and, in fact, each define channels 32, 34, 36, 38, 40, 42, and 44 along the length of base member 24. Thus, it is believed that spacer portions 46 do not teach the claimed teeth. Therefore, *McCracken* does not teach the above-recited feature of claim 33.

In the Response to Arguments portion of the Final Action, the Examiner asserts that the term, “teeth,” covers spacer portions 46 when the term is given its broadest reasonable interpretation. Final Action at 13. Spacer portions 46 extend along the length of base portion 24 and define channels 32, 34, 36, 38, 40, 42, and 44. *See McCracken* at figure 2. Accordingly, it is simply not reasonable to assert that such structures are teeth.

Also in the Response to Arguments section of the Final Action, it appears that the Examiner asserts that the term, “teeth,” describes cable retaining section 94 when the language is given its broadest reasonable interpretation. Final Action at 13. Cable retaining section 94 is not properly described as teeth. Rather, cable retaining sections 94, 94', and 94'' are merely the periphery of base member 80. *McCracken* at Col. 3, lines 44-46 and

figure 2. Further, cable retaining section 94 includes spacers 98; however, spacers 98 do not teach teeth as claimed. Instead, spacers 98 align with spacer portions 46 to define the walls of channels 32, 34, 36, 38, 40, 42, and 44. Thus, spacers 98 are part of the same channel wall structure as spacer portions 46 and are not properly described as “teeth.” For at least these reasons, it is believed that *McCracken* does not teach the above-recited feature of claim 33.

Dependent claims 34 and 35 each depend either directly or indirectly from independent claim 33 and, thus, inherit all of the limitations of independent claim 33. Thus, *McCracken* does not teach all claim limitations of claims 34 and 35. It is respectfully submitted that dependent claims 34 and 35 are allowable at least because of their dependence from claim 33 for the reasons discussed above. Accordingly, Appellant respectfully requests the withdrawal of the 35 U.S.C. § 102 rejection of claims 33-35.

#### 14. Claim 40

Claim 40 recites, “The mechanism of claim 33 wherein at least one of said plurality of teeth is a peg.” *McCracken* does not teach this feature at least because it does not teach a peg. The Examiner cites figures 4 and 5 of *McCracken* to teach the feature. Final Action at 9-10. Figure 4 does not teach a peg. Figure 4 of *McCracken* is a view of the mechanism of figure 3 wherein the line of sight is parallel to channels 32, 34, 36, 38, 40, 42, and 44. This is an incomplete (and somewhat misleading) view of spacer portions 46, which run the length of the mechanism shown in figure 2. As observed in figure 2, spacer portions 46 clearly are not pegs.

Figure 5 depicts spacers 98; however, spacers 98 do not teach pegs as claimed. Instead, spacers 98 align with spacer portions 46 to define the walls of channels 32, 34, 36, 38, 40, 42, and 44. In fact, spacers 98 are more appropriately described as a section of an elongated channel wall that includes items 98 and 46. Thus, spacers 98 are part of the same channel wall structure as spacer portions 46 and are not properly described as “pegs.” For at least these reasons, it is believed that *McCracken* does not teach the above-recited feature of claim 40.

C. Second Ground of Rejection

On pages 10-12 of the Final Action, claims 18, 30, and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *McCracken*.

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the applied reference. *See In re Vaeck* 947 F.2d 488, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. *In re Merck and Co., Inc.*, 800 F.2d 1091, 231 USPQ 375, 379 (Fed. Cir. 1986). Finally, the applied reference(s) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580, 583 (CCPA 1974). Without conceding any other criteria, Appellant respectfully asserts that the rejection does not satisfy the third criterion, as discussed further below.

Dependent claims 18, 30, and 31 each depend either directly or indirectly from respective independent claims 1 and 24 and, thus, inherit all of the limitations of their respective independent claims. It was shown above that *McCracken* does not teach all limitations of claims 1 and 24. Thus, *McCracken* does not teach or suggest all claim limitations of claims 18, 30, and 31. It is respectfully submitted that dependent claims 18, 30, and 31 are allowable at least because of their dependence from their respective base claims for the reasons discussed above. Accordingly, Appellant respectfully requests the withdrawal of the 35 U.S.C. § 103 rejection of claims 18, 30, and 31.

D. Third Ground of Rejection

On pages 12-13, claims 15, 16, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over *McCracken* in view of *Kitagawa*.

I. Failure to teach or suggest all claim limitations

a. Claim 16

Claim 16 recites, in part, “at least a portion of said first channel is wider than said second channel thereby allowing said cables to spread out along said first channel before said cables transition from said first direction to said second direction.” *McCracken* does not



teach or suggest this feature of claim 16 at least because it does not teach or suggest a portion of a first channel is wider than a second channel. For instance, the Examiner cites the vertical direction and horizontal direction of figure 5 of *McCracken* as being two channels, one wider than the other. Final Action at 12-13. However, the horizontal and vertical directions in figure 5 appear to be the same width. Thus, *McCracken* does not teach or suggest this feature of claim 16. The Examiner does not rely on *Kitagawa* to teach or suggest the feature. Accordingly, reversal of the rejection of claim 16 is respectfully requested.

b. Claims 15 and 32

Dependent claims 15 and 32 each depend either directly or indirectly from respective independent claims 1 and 24 and, thus, inherit all of the limitations of their respective independent claims. It was shown above that *McCracken* does not teach all limitations of claims 1 and 24. Thus, *McCracken* does not teach or suggest all claim limitations of claims 15 and 32. The Examiner does not rely on *Kitagawa* to cure the deficiencies of *McCracken*, nor does *Kitagawa* cure the deficiencies. It is respectfully submitted that dependent claims 15 and 32 are allowable at least because of their dependence from their respective base claims for the reasons discussed above. Accordingly, Appellant respectfully requests the withdrawal of the 35 U.S.C. § 103 rejection of claims 15 and 32.

2. Lack of motivation to combine *McCracken* and *Kitagawa*

The Examiner fails to provide the requisite motivation to combine *McCracken* with *Kitagawa*. It is well settled that the fact that references can be combined or modified is not sufficient to establish a *prima facie* case of obviousness. On pages 12 and 13 of the Final Action, respectively, the Examiner states:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make *McCracken* system with a gasket positioned between the channels and the enclosure and make said gasket of a material that is compatible with electromagnetic interference specifications of said electronics enclosure as taught by *Kitagawa* to provide means for protecting the electronic components inside the enclosure against electromagnetic waves.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make *McCracken* system with a gasket positioned between the channels and the enclosure and make said gasket of a material

that operates to minimize electromagnetic interference as taught by *Kitagawa* to provide means for protecting the electronic components inside the enclosure against electromagnetic waves.

The first quote is the Examiner's reasoning to modify *McCracken* with a feature from *Kitagawa* to teach the limitations of claim 15. Similarly, the second quote is with regard to claim 32. Both statements are circular in that they assert that it is obvious to add the missing parts to *McCracken* in order to have a system that includes the missing parts. In arguing this, the Examiner fails to suggest the desirability for such a modification. Such language is merely a statement that the references can be modified, and does not state any desirability for making the modifications. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combinations. *In re Mills*, 16 U.S.P.Q.2d 1430, 1432 (Fed. Cir. 1990). Thus, the failure to provide motivation suggesting desirability of the modifications is improper. Accordingly, Appellant respectfully submits that the 35 U.S.C. § 103(a) rejection of claims 15, 16, and 32 fails.

#### VIII. CLAIMS APPENDIX

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

#### IX. EVIDENCE APPENDIX

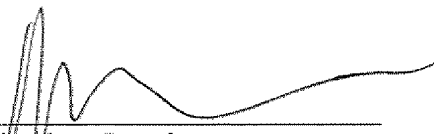
No evidence is relied upon by Appellant.

#### X. RELATED PROCEEDINGS APPENDIX

There are no related proceedings.

Dated: December 27, 2006

Respectfully submitted,

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**APPENDIX A**

**Claims Involved in the Appeal of Application Serial No. 10/732,975**

1. A cable routing system comprising:  
a first channel for routing at least one of a plurality of cables in a first direction;  
a second channel for routing said at least one cable in a second direction; and  
a plurality of teeth spaced apart from one another and disposed in one of said first channel and said second channel, said teeth positioned to create spaces in-between said plurality of cables before said at least one cable transitions from said first direction to said second direction.
2. The system of claim 1 wherein said first channel comprises:  
a base; and  
a plurality of sides projecting outward from said base.
3. The system of claim 2 wherein said second channel comprises:  
a base; and  
a plurality of sides projecting outward from said base.
4. The system of claim 3 wherein said first channel and said second channel are positioned next to each other to create a cable bend area wherein said bend area is sized to allow said cables to maintain said spaces as said cables transition from said first direction to said second direction.
5. The system of claim 3 wherein said second channel further comprises:  
a cover operating to cover said second channel base.
6. The system of claim 5 wherein said teeth are located within said second channel and project outward from said second channel base
7. The system of claim 4 wherein said teeth are located in said first channel next to said bend area and said teeth project outward from said first channel base.
8. The system of claim 7 wherein said teeth are mounted to a teeth base wherein said teeth base is mounted to said first channel base.

9. The system of claim 7 wherein said first channel further comprises:  
a cover operative to cover said base.

10. The system of claim 7 wherein said first channel further comprises:  
a plurality of covers;  
a plurality of base fastening devices attached to said base;  
a plurality of cover fastening devices attached to said covers; and  
wherein at least one of said cover fastening devices is operative to secure at least one of said plurality of covers to said base by fastening to at least one of said plurality of base fastening devices.

11. The system of claim 10 wherein said plurality of covers comprise one or more of:

a clear cover;  
an opaque cover;  
a vented cover; and  
any combination of said clear, opaque, or vented cover.

12. The system of claim 7 wherein said plurality of teeth extend diagonally outward from said first channel base.

13. The system of claim 12 wherein said first channel and said second channel are positioned at a right angle with respect to one another thereby creating a right angle bend.

14. The system of claim 13 wherein said first channel and said second channel are mounted inside of an electronics enclosure.

15. The system of claim 14 further comprising:  
a gasket positioned between said channels and said electronics enclosure wherein said gasket is comprised of a material that is compatible with electromagnetic interference specifications of said electronics enclosure.

16. The system of claim 15 wherein at least a portion of said first channel is wider than said second channel thereby allowing said cables to spread out along said first channel before said cables transition from said first direction to said second direction.

17. The system of claim 1 wherein said first channel is multisectional.

18. The system of claim 1 wherein said first channel, said second channel, and said teeth are made of hot dipped galvanized steel.

19. A method for routing cables comprising:  
defining a first channel;  
defining a second channel;  
disposing a plurality of teeth in one of said first channel and said second channel,  
wherein said teeth are spaced apart from one another to create a plurality of cable paths; and  
running said cables in said first channel, through said cable paths, and into said second channel.

20. The method of claim 19 wherein said first channel comprises:  
a base; and  
a plurality of sides.

21. The method of claim 20 further comprising:  
positioning said first channel and said second channel near one another thereby  
creating an angle bend for said cables and a cable bend area wherein said bend area allows  
said cables to maintain cable spacing as said cables transition from said first channel to said  
second channel; and  
mounting said plurality of teeth in said first channel next to said angle bend.

22. The method of claim 21 wherein said running said cables step comprises:  
running said cables into said first channel;  
assigning each cable of said plurality of cables to at least one cable path of said  
plurality of cable paths;  
threading said cables through said assigned cable paths;  
running said cables from said assigned cable paths into said angle bend; and  
running said cables from said angle bend into said second channel.

23. The method of claim 22 further comprising:  
disposing a plurality of teeth inside of said second channel, wherein said teeth are spaced apart from one another thereby creating a plurality of second channel cable paths;  
mounting said plurality of teeth in said second channel near said angle bend; and  
said running said cables from said angle bend into said second channel step comprises:  
assigning each cable of said cables in said angle bend to at least one of said plurality of second channel cable paths, and  
running said cables from said angle bend through said assigned second channel cable paths into the remainder of said second channel.

24. An apparatus for increasing the bend radius of a plurality of cables routed in a computer enclosure from a first direction to a second direction that is different from said first direction, said apparatus comprising:  
a first channel having a base and a plurality of sides, and  
a second channel having a base, a plurality of sides, and a plurality of teeth spaced apart from one another operating to create spaces in-between said plurality of cables wherein said first channel and said second channel are positioned to create a cable bend area wherein said bend area is sized to allow said cables to maintain said spaces as said cables transition from said first channel to said second channel.

25. The apparatus of claim 24 wherein said first channel is mounted in an orientation that is vertical with respect to said second channel inside of said computer enclosure so that a right angle is formed between said first channel and said second channel.

26. The apparatus of claim 25 wherein said teeth are mounted next to said cable bend area.

27. The apparatus of claim 24 wherein said first channel further comprises:  
at least one cover;  
a plurality of base fastening devices attached to said base; and  
a plurality of cover fastening devices attached to said cover wherein said plurality of cover fastening devices operate to secure said cover to said base by fastening to said plurality of base fastening devices.

28. The apparatus of claim 27 wherein said first channel further comprises:  
a plurality of teeth mounted inside of said first channel spaced apart from one another projecting outward from said first channel base wherein said teeth are operative to space said cables apart as said cables run through said first channel.

29. The apparatus of claim 24 wherein said second channel further comprises:  
at least one cover;  
a plurality of second channel base fastening devices attached to said second channel base; and  
a plurality of cover fastening devices attached to said cover wherein said cover fastening devices operate to secure said cover to said second channel base by fastening to said second channel base fastening devices.

30. The apparatus of claim 24 wherein at least one of said plurality of teeth is shaped differently from the remaining plurality of teeth.

31. The apparatus of claim 24 wherein at least one of said plurality of teeth is sized differently from the remaining plurality of teeth.

32. The apparatus of claim 25 further comprising a gasket positioned in-between said channels and said computer enclosure wherein said gasket is made of a material that operates to minimize electromagnetic interference.



33. A mechanism for routing a plurality of cables in an electronics enclosure, said mechanism comprising:

- means for routing said cables in a first direction;
- means for routing said cables in a second direction;
- means for increasing a plurality of bend radii of said plurality of cables while transitioning from said first direction routing means to said second direction routing means, wherein said bend radii increasing means comprises a plurality of teeth defining said bend radii.

34. The mechanism of claim 33 further comprising:

- means for covering cables routed in said first direction routing means; and
- means for securing said covering means to said first direction routing means.

35. The mechanism of claim 34 further comprising:

- means for covering cables routed in said second direction routing means; and
- means for securing said covering means to said second direction routing means.

37. The cable routing system of claim 1 wherein at least one of said plurality of teeth is a peg.

38. The method of claim 19 wherein at least one of said plurality of teeth is a peg.

39. The apparatus of claim 24 wherein at least one of said plurality of teeth is a peg.

40. The mechanism of claim 33 wherein at least one of said plurality of teeth is a peg.

**APPENDIX B**

None.

**APPENDIX C**

None.